

National Recycling Coalition's 26th Annual Congress & Expo

September 16-19, 2007

"Uncovering the Drivers of Consumer Recycling Behavior"

Speaker:

Kate Krebs, National Recycling Coalition (NRC)

Summary:

NRC recognized that there is decline in recycling rates and, given this decline, determined there is a need to take a focused approach to reverse the trend. In order to determine a focus, NRC conducted an in-depth consumer research on what Americans think about recycling and what drives them to recycle. The study asked participants to journal their recycling behaviors over a specified period of time. The results of recycling behavior were categorized three ways: always, sometimes, never. The findings of the study showed the following: (1) emotional connections drive recycling behaviors; (2) individual behavioral commitments are more effective than simply informing people about opportunities; (4) recycling is considered a moral behavior and; (5) focus efforts on the "sometimes" recyclers to promote sustained recycling behavior.

NRC will use these findings to reshape the recycling message and build out a consumer campaign that will re-engage Americans in recycling.

"Opening Session"

With the general public and governments at all levels renewing attention on the environment, three major corporate leaders engage in an open exchange on how businesses are responding to their environmental responsibilities. The leaders, representing a cross-section of business interests, discuss the environmental expectations from government, shareholders, customers, employees, and other stakeholders, and its profound impact on corporate strategy and the delivery of goods and services in a global marketplace.

Moderator:

Marc Gunther, Fortune Magazine

Speakers:

Scott Vitters, Director of Sustainable Packaging for Coca-Cola North America (<http://www.thecoca-colacompany.com/citizenship/environment.html>)

Mindy S. Lubber, President, CERES (<http://www.ceres.org/>) - A national network of investors, environmental organizations, and public interest groups working with companies to address sustainability challenges.

Dave Steiner CEO, Waste Management (<http://www.wm.com/>)

Summary:

The opening session provided an interesting set of panelists who discussed the concept of "zero waste" with in the context of climate change. The panelists provided their own perspective based upon their model of operation. Dave Steiner, CEO of Waste Management, defined zero waste as collecting and processing waste materials for re-utilization. His focus was to make recycling simpler for the consumer thereby increasing the volume of materials in the recycling stream. Scott Vitters, Coca-Cola, defined zero waste, more narrowly, in terms of the material packaging of the products in which the discard should be considered valuable raw material for reuse. He defined the current state of sending packaging materials to landfills as a core inefficiency which means added cost for companies. Mindy Lubber, Ceres, stated that both public and private organizations should participate together in bringing about changes.

"System Optimization – Improving the Performance of Recycling Programs"

Municipalities, counties and regional governments are all striving to up their recycling rates, using cutting edge promotions, catchy public education campaigns, untapped generators, innovative regulatory actions, simplified collection methods, and state-of-the-art processing equipment/facilities.

Moderator:

- E. Gifford Stack, New Mexico Environmental Department

Speakers:

- Michael Taylor, Recycle America Alliance/Waste Management, Inc.

- [Jeffrey Callahan](#), Boulder County, CO

- Robert Gedert, City of Fresno, CA

Summary:

Robert Gedert, City of Fresno, CA: Techniques used to go beyond 50% diversion goal: (1) Clearly designate what can and cannot be recycled (e.g., blue bin = recycling, gray bin = trash, green bin = green waste); (2) avoid compliance type messages when talking about recycling (e.g., this is mandated) and use messages that are value-oriented like recycling saves money on garbage bill or helps to stop global warming; focus on staff efforts to motivate others to act voluntarily; (3) green business pairing/partnerships; (4) hire student interns to audit commercial waste (check out what is thrown in roll-offs).

Jeffrey Callahan, Boulder County, CO: Planning, outreach and funding are key. County has experienced an increase in diversion (27%) through pilot programs such as 2005 organics collection, 2006-2007 Zero Waste County Fair (use of PLA compostable beer cups at events), 2007 single stream technology use and organics collection, zero waste in all city buildings 2008, composting tubs at county jail. For Callahan, zero waste definition includes organics, electronics, yard waste, metal and appliance program, clothing/uniforms).

Mike Taylor, Waste Management (WM): Single stream technology use has been around for at least 13 years. Single stream processing increases collection efficiencies which increases greater diversion efforts; however, it also increases sorting complexities regarding material mix vs. stream composition. WM uses a computer system to optically sort materials, but the equipment has difficulty in the change of composition of materials (e.g., blue, green, orange PET bottles as opposed to glass). Therefore, it is important to have sorting flexibility and expansion capacity to meet changing composition of materials and increasing demands.

Quotes: "Any waste as an output from a business is an operational inefficiency - Buckminster Fuller

"Recycling and Sustainability"

Each year, more and more communities and businesses establish programs for environmental sustainability. This session examines the strategically vital and vibrant role that recycling plays in development of sustainability programs.

Moderator:

Susan Katchee, City of Oakland

Speakers:

Matt Hale, US EPA

Mark Buckley, Staples, Inc.

Bruce Walker, City of Portland, Oregon

Summary: Mark Buckley of Staples: When consumers purchase a product, they focus on the quality of the product first and if the product happens to be environmentally friendly it's a bonus but not a purchasing driver. He believes there needs to be a flip in this purchasing paradigm to create a market dynamic which increases purchase of post consumer materials with recycled content. However, there is a new trend emerging. Corporate clients are now asking the question of Staples, if we purchase from you, how are you going to help us to reduce our carbon footprint? Buckley believes this type questioning will influence the way Staples does business.

Quote: "Waste is material in the wrong place" Unknown

Bruce Walker City of Portland Oregon: The city has approximately 1.1 million residents who benefit from the following programs: (1) energy - weatherization of low income residential homes using tax incentives and grants; (2) wind power - purchasing renewable credits; (3) sustainable food system

program using local agricultural market (provided to school food programs); (4) plans to increase use of solar and greenbuildings; (5) fuel stations - if diesel is sold, then the station is required to have a pump for biodiesel as well; (6) paper purchases - default is 30% recycled content paper otherwise a waiver is requested; (7) product stewardship - e-scrap requirement); (8) city has 75% recycling goal with a focus on construction debris, compost and traditional products (e.g., paper) and; (9) 2015 goal is to decrease per capita consumption below 2005 levels.

Quote: "We walk our talk." Bruce Walker

Matt Hale, US EPA: Recommends using EPA's WARM Model (Waste Reduction Model) which is a Web-based calculator that performs life cycle cost analysis of different materials to determine energy benefits or savings. The output or resulting calculation from the model helps to connect the benefit of recycling to critical issues in sustainability. Hale believes that product design and source reduction are the key in determining benefits/savings. The U.S. national recycling rate is currently 32%.

"Comprehensive Recycling Strategies for Special Events"

Every community is faced with one or more special events each year that pose unique challenges to recycling programs. Communities, businesses, and institutions are analyzing and addressing these challenges in order to maintain high recycling rates under often difficult circumstances.

Moderator:

George Dreckmann, City of Madison, WI

Speakers:

Judy Taylor, U.S. EPA, Office of Solid Waste
Steve Campbell, Anheuser-Busch Recycling
Pat Kaufman, University of Washington, Seattle
Anne Eskridge, University of Washington, Seattle

Summary:

University of Washington at Seattle provided success stories to show why their recycling rate increased from 18% in 2005 to 28% in 2006. The Blue Bag Recycling Outreach pilot program was launched to promote can, bottle and cardboard recycling at tailgate parties. A team of student recycling staff offered the bags to tailgaters and were given information regarding the university's recycling program and given instructions to fill the blue bags with cans, bottles, and cardboard and place them near recycle totes. By the end of the season, regular tailgaters were aware of the program and were cooperative participants. This operation, along with the expansion of a food waste composting collection program and other enhancements to the stadium recycling program improved the Husky Football Solid Waste/Recycle Program.

<http://www.washington.edu/admin/recycling/>

Anheuser-Busch's Green Teams assist event organizers to promote environmentally friendly events. Daytona 500, PGA Tournaments and Sturgis Bike Week are a few of the events that the Budweiser Green Teams participate in. The Bonnaroo Music Festival in Tennessee was also a successful Green Team event in that it utilized unique strategies to incorporate recycling. Upon entering the festival, campers were given a rolled up plastic bag specifically for recycling and an informational flyer to inform them of the purpose. Green Teams canvassed the grounds informing attendees of the recycling efforts at the festival. Steve Campbell from A-B gave a few important tips in creating a successful event with regards to recycling. 1) Advertise the recycling program. 2) Tie the experience to recycling. 3) Find the right champion to promote program. 4) Utilize the proper recycling containers for the specific conditions of the event. 5) Study the layout of the event to determine optimal placement of recycling containers.

<http://www.abenvironment.com/>

"Commodity Markets Update"

Thriving commodity markets continue to drive the economics of recycling programs. The latest information and forecasts on the future of demand and prices in the global recycling market are presented.

Moderator:

David Refkin, Time, Inc.

Speakers:

Bill Heenan, Steel Recycling Institute

Gary Wygant, Novelis Corporation

Joseph Cattaneo, Glass Packaging Institute

Patty Moore, Moore Recycling Associates, Inc.

Summary:

Paper recovery in U.S. is at 53% with no new recovered paper recycling efforts initiated at curbside. There is a much higher annual consumption rate than paper production. As China has only 4% of the world's trees, the country is very dependant on the U.S. for supply. China recovers about 85% of their paper.

China is the U.S.'s 4th largest trade partner. The top 3 U.S. exports to China are 1) Computers 2) Transportation Equipment 3) Waste and Scrap. Because of extreme poverty in China, waste is recycled and reutilized. It is illegal to import used and intact **plastic** into China, it must be initially processed. The export market is currently the best option for mixed resin bales, of which the current value is \$.08 - .19/lb. In plastic exports, China is the price leader of PET. Crude Oil has an impact, but not directly, on scrap market prices. For domestic PET and HDPE bottle reclamation, capacity continues to exceed supply with the question of whether reclaimers and converters will be able to adapt to new bottle constructions. Demand from domestic markets is strong for HDPE bottles and strong for domestic and export markets for clean film.

<http://www.caplasticsmarkets.com/index.php>

Cullet is comprised of 80% recycled **glass**. The market for cullet is glass bottles, jars and fiberglass. 70% of cullet comes from the 11 bottle bill states. Glass is comprised of 70-75% sand, 10-15% soda ash, 10-15% limestone and 5% cullet. Glass is 100% recyclable, does not pollute, and is considered a safe packaging material by the FDA. The U.S. imports glass from China for wine bottle manufacturing. Beer bottles make up 59% of all glass containers. In January 2008, a North Carolina law will require that businesses with a liquor license recycle the bottles, cans or other containers used to serve beverages.

<http://www.gpi.org/index.cfm>

Metal Recycling remains strong as it has for years. Steel is North America's #1 recycled material and in the past 50 years, around 50% of the steel produced in the country has been recycled through the steelmaking process. The eastern part of the U.S. recycles at a rate of 80% while the south is at the low end with a 30% recycling rate. The main point made was the need to recycle for water conservation efforts.

<http://www.recycle-steel.org/>

(Aluminum) More than half of households have access to curbside pickup, but less than half participate. In Georgia, 70% of materials sent to the landfills are recyclable and \$90 million is spent throwing away \$270 million worth of recyclables. There is \$6 billion worth of recyclables in landfills.

<http://www.novelis.com/Internet/en-US>